DOCUMENT RESUME

ED 195 865 CG 014 816

AUTHOR Bergum, Judith E.; Bergum, Bruce O.
TITLE Field Dependence and Anxiety.
PUB DATE Apr 80
NOTE 10p.; Paper presented at the Annual Convention of the Southwestern Psychological Association (26th, Oklahoma City, OK, April 10-12, 1980).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Adjustment (to Environment); *Anxiety; *Behavior Patterns; Body Image; *Cognitive Style; Decision Making; *Locus of Control; *Perceptual Motor Learning; Personality Traits; Psychological Characteristics; *Sex Differences; Stimuli
IDENTIFIERS *Field Dependence Independence

ABSTRACT

The concept of field dependence/independence is defined by the behavior patterns of individuals. Those who use predominantly internal cues when making judgments on perceptual tasks are considered field independent; those who use predominantly external cues are considered field dependent. To test whether field dependence is related to anxiety, subjects completed the State-Trait Anxiety Inventory and the Group Embedded Figures Test. Field dependence was found to be significantly related to anxiety, i.e., those who were more anxious were more field dependent. As in previous studies, no evidence of sex differences in either field dependence or anxiety level was found. Findings suggest that the more field independent persons have better control over their environment and can restructure it more easily. This conclusion appears applicable primarily to individuals rather than to broad, nondiscriminating categories such as gender. (Author/CS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED195865

Field Dependence and Anxiety

Judith E. Bergum
Texas Transportation Institute

Bruce O. Bergum
Texas A&M University

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Judith E. Bergum

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Paper presented at the

Southwestern Psychological Association

Oklahoma City, Oklahoma

April, 1980

Running head: Field Dependence

CG 014816

Field Dependence and Anxiety

Witkin (1950) first conceived of the concept of field dependence/independence as a generalized perceptual cognitive style. Individuals who emphasized internal cues while making judgments on perceptual tasks were considered field independent, while those who emphasized external cues were considered field dependent.

According to Willerman (1979) this line of research was stimulated by the observation that some airplane pilots would enter clouds right side up and emerge from them upside down without awareness that their position had become inverted while in the cloud. This observation led to investigations of the perception of the upright and to a vast body of research showing how perception of the upright related to other intellectual and personality factors.

Maccoby and Jacklin (1974) write that it has been alleged that field independence forms part of a larger cluster of abilities, sometimes called analytic abilities. A field independent individual is said to be skilled in a large range of tasks that require ignoring a task-irrelevant context or focusing upon selected elements of a stimulus display. Field independence is also thought to imply an ability to restructure a problem-solving situation, to inhibit a well established response in the interest of breaking away from an unproductive set and taking a fresh approach to a problem.

Witkin, Lewis, Hertzman, Mackover, Meissner, and Wapner (1954) further stated in their findings that the extent of activity in dealing with one's environment is the characteristic that most effectively discriminates among people with different modes of perception. One trend, passivity, is associated with field dependent perceptual performance; the other, activity, is associated

with independent or analytical perceptual performance. The passivity of field dependence implies the inability to function independently of environmental support, an absence of initiating activity, and a readiness to submit to forces of authority. The activity of field independence, on the other hand, involves the ability to function with relatively little support from the environment, a capacity for initiating and organizing, and the power to struggle for mastery over social and environmental forces.

Witkin et al. (1954) claimed that field dependent/independent individuals could also be differentiated on the basis of their handling of their own inpulses and strivings. Field dependent individuals exhibited a lack of awareness of inner life, fear of aggressive and sexual impulses, and poor control over those impulses. Along with those characteristics, they claimed to find evidence of considerable anxiety, combined with difficulty in regulating it. Field independent individuals, on the other hand, were aware of inner life, displayed a tendency to accept the existence of hostile and sexual impulses, and a more-or-less effective discharge and control of these impulses, along with a trend toward a lower level of anxiety and more effective techniques for regulating it. In self-evaluation the field dependent individual was thought to display low self-esteem, difficulty in self-acceptance, and low evaluation of one's body. The field independent individual displayed high self-esteem, self-acceptance, and confidence in the body.

In summary, Witkin et al. (1954) described field dependent persons as characterized by passivity in dealing with the environment; by unfamiliarity with and fear of their own impulses, together with poor control over them; by lack of self-esteem; and by the possession of a relatively primitive, undifferentiated body image. Field independent, or analytic perceptual performers,

in contrast, were described as characterized by activity and independence in relation to the environment; by closer communication with, and better control of, their own impulses; and by relatively high self-esteem and more differentiated, mature body images. It was claimed that these relationships were confirmed not only for young, normal adults, but also for children and hospitalized psychiatric patients. Most of the personality variables were evaluated by means of the Rorschach and other projective techniques.

Witkin, Dyk, Faterson, Goodenough, and Karp (1962) in further research related various personality variables to the field dependence/independence dimension. The relationship between personality characteristics and characteristic ways of responding to perceptual tasks was found to be such that induviduals who are more analytic and who cope with the environment more actively are more independent of the context of the field in these tasks. Individuals who are more dependent on their environment for support and direction are also more suggestible to environmental cues in perceptual tasks. This perceptual cognitive style pervades an individual's intellectual, emotional, and social activities. The field independent individual tends to be socially independent, to exhibit a well developed sense of separate identity, to be less open to persuasion, and to utilize intellectualized defense operations. In contrast, the field dependent individual relies on social cues to guide interpersonalized relations, adopts a passive, dependent orientation toward the environment, and tends to use unsophisticated and primitive defenses.

Witkin, Goodenough, and Karp (1967) have found evidence that this cognitive style exhibits considerable stability through childhood and early adulthood and is related to a number of personality variables such as

leadership (Weissenberg & Gruenfeld, 1966) and social conformity (Witkin, Dyk, Faterson, Goodenough, & Karp, 1974).

Those who do poorly on tests of field dependence/independence also appear to be somewhat dependent in their social relationships. In interpersonal relations field dependents are more sociable, prefer to by physically close to others, and have well developed sets of social skills. Field independents tend to be more impersonal, do not appear to be very interested in others, and prefer nonsocial situations (Witkin & Goodenough, 1977).

According to Witkin and his associates (1962), males are more field independent and females are more field dependent. Since the characteristics which were assigned to field dependence are more typically associated with anxiety, and females were said to be more field dependent, by implication, females should exhibit more anxiety than males. Much research effort has been expended on the nature of this sex difference in field dependence, but many researchers, including Bergum (1979) have not found one.

Measures of general anxiety have followed a pattern closely paralleling that of field dependence. When there is a reported sex difference, it is generally found that girls and women report a higher level of general anxiety than boys and men (Maccoby and Jacklin, 1974).

There have been several studies that have attempted to relate field dependence to anxiety. In 1973, Dargel and Kirk tested a group of 160 undergraduates in a small Liberal Arts college and found nonsignificant correlations between field dependency and measures of anxiety for all subjects and for both males and females. As assessment instruments, they used the Hidden Figures Test, the Taylor Manifest Anxiety Test, and the Institute for Personality and Ability Testing Anxiety Scale Questionnaire, which is a measure of clinical anxiety. Joshi (1974) also found no rela-

tionship between field dependence and anxiety using a British sample of 143 12-year-old school boys and girls.

The purpose of this study was to relate field dependence to anxiety using a broad sample of undergraduates.

Two hundred forty undergraduates (120 male and 120 female) representing all of the colleges of a large university were administered the Trait Scale of the State-Trait Anxiety Inventory (Spielberger,Gorsuch, & Lushene, 1970), as well as the Group Embedded Figures Test (Witkin, Oltman, Raskin, & Karp, 1971).

On both tests, there were no significant sex differences, the means of the males and females being essentially the same. A coefficient of correlation was calculated between the scores on the Group Embedded Figures Test and the State-Trait Anxiety Test. The results showed that field dependence was significantly related to anxiety (r (238) = -.17, p<.01). Those who were more anxious were more field dependent, and those who were more field independent were less anxious. This relationship held for both sexes.

Although this finding is consistent with Witkin's hypothesis, one can accept this conclusion without accepting his particular, rather psychoanalytic interpretation that with a less structured defensive system, a greater amount of anxiety is apt to be expressed. It appears that those who are more field independent have better control over the environment, and thus can restructure it more easity. The greater anxiety of those who are more field dependent can be attributed to a lesser degree of environmental control without resorting to the concept of unfamiliarity and fear of their own impulses and a less structured defensive system.

Once again there is no evidence of sex differences. Not only are there no differences in field dependence, there are no differences in anxiety

levels, at least for the sample studied. A reasonable hypothesis might be that the perceptual differences exhibited in earlier research may have been a reflection of the more rigid socialization processes in former years. One implication is that the assumptions about sex differences that have been the basis for many recommendations in the area of career counseling might well be reexamined. The question of field dependence and anxiety had best be considered in terms of the individual rather than such broad and apparently nondiscriminating categories such as sex.

References

Bergum, J.E. Field dependence, perceptual restructuring, egalitarian attitudes, and anxiety in traditional and nontraditional sex-typed career choices. Unpublished doctoral dissertation, Texas A&M University, 1979.

Dargel, R., and Kirk, R.E. Note on relation of anxiety to field dependency. Perceptual and Motor Skills, 1973, 37, 278.

Joshi, R.T. Field-dependence, anxiety and personality. Perceptual and Motor Skills, 1974, 38, 1328.

Maccoby, E.E., and Jacklin, C.N. The psychology of sex differences. Stanford, Calif.: Stanford University Press, 1974.

Spielberger, C.D., Gorsuch, R.L., and Lushene, R.E. Manual for the State-Trait Anxiety Inventory. Palo Alto, Calif.: Consulting Psychologists Press, 1970.

Weissenberg, P., & Gruenfeld, L.W. Relationships among leadership dimensions and cognitive style. Journal of Applied Psychology, 1966, 50, 392-395.

Willerman, L. The psychology of individual and group differences. San Francisco: W.H. Freeman, 1979.

Witkin, H.A. Individual differences in ease of perception of embedded figures. Journal of Personality, 1950, 19, 1-15.

Witkin, H.A., Dyk, R., Faterson, H., Goodenough, D.R., & Karp, S.A. Psychological differentiation. New York: Wiley, 1962.

Witkin, H.A., Dyk, R., Faterson, H., Goodenough, D.R., & Karp, S.A. Social conformity and psychological differentiation. International Journal of Psychology, 1974, 9, 11-29.

Witkin, H.A., & Goodenough, D.R. Field dependence and interpersonal behavior. Psychological Bulletin, 1977, 84, 661-689.

Witkin, H.A., Goodenough, D.R., & Karp, S.A. Stability of cognitive style from childhood to young adulthood. Journal of Personality and Social Psychology, 1967, 7, 291-300.

Witkin, H.A., Lewis, H.B., Hertzman, M., Mackover, K., Meissner, P.B., & Wapner, S. Personality through perception. New York: Harper, 1954.

Witkin, H.A., Oltman, P.K., Raskin, E., & Karp, S.A. A manual for the Embedded Figures Test. Palo Alto, Calif.: Consulting Psychologists Press, 1971.